

**Setting up of nuclear power plant by NTPC**

3430. SHRI V. HANUMANTHA RAO: Will the Minister of POWER be pleased to state:

(a) whether it is a fact that NTPC propose to enter into nuclear power generation by putting up a 2000MW nuclear power plant;

(b) if so, the details of this proposal;

(c) the location of the proposed 2000 MW plant;

(d) the funding pattern for this plant;

(e) the details of technical expertise NTPC already have to set up and operate such a plant; and

(f) what would be effective cost of generation of 1 MW of power from this plant by NTPC?

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE): (a) to (c) NTPC Ltd. is planning to foray into nuclear power generation. NTPC Ltd.'s Corporate Plan for the period 2002-2017 envisages taking up 2000 MW of nuclear capacity in joint venture during the 12th Plan period. Government has also conveyed its approval to amend the object clause of the Memorandum of Association of Company for taking up nuclear power projects.

At present, selection of optimal technology option and identification of potential site(s) for setting up of first nuclear project is in process.

(d) In line with other projects of NTPC Ltd., the proposed nuclear power project would be funded in the debt-equity ratio of 70:30.

(e) Although NTPC Ltd. is having rich experience in construction and operation of large capacity thermal power projects and more recently the foray into hydro projects it is, however, proposed to engage experienced technical consultants of international repute for advising NTPC Ltd. in all aspects of setting up of first 2000 MW nuclear power plant including training of manpower in design, operation and developing necessary competence in NTPC Ltd. for building future nuclear plants.

(f) Cost of power generation per MW shall be known only after finalization of plant location, fuel tie-up, technology, finalization of Feasibility Report, etc.

### **Power generation from different sources**

3431. SHRI MAHMOOD A. MADANI: Will the Minister of POWER be pleased to state:

(a) the details of Government's plan to improve the ratio of different types of power generation sources namely, atomic, thermal, hydel and renewable sources of energy; and

(b) what is the international standard for these ratios?

THE MINISTER OF POWER (SHRI SUSHIL KUMAR SHINDE):  
(a) The installed capacity at the end of X Plan (March, 2007) is 1,32,329 MW comprising of:

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Hydro	34,654 MW (26.2%)
Thermal	86,015 MW (65%)
Nuclear	3,900 MW (2.9%)
Wind Renewable Energy Sources	7,761 MW (5.9%)

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The capacity addition from conventional sources proposed during the XI Plan period is of order of 78,577 MW comprising of:

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Hydro	16,553 MW (21.1%)
Thermal	58,644 MW (74.6%)
Nuclear	3,380 MW (4.3%)

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In addition, Ministry of New and Renewable Energy (MNRE) plans to add 13,500 MW during the XI Plan.

(b) There is no international standard ratio defined as such. It depends upon the availability of these sources for power generation and their development profile.